

Abstract

In one form of the invention, there is provided a laser comprising a front mirror and a rear mirror being disposed so as to establish a reflective cavity therebetween; a gain region disposed between the front mirror and the rear mirror, the gain region being constructed so that when the gain region is appropriately stimulated by light from a pump laser, the gain region will emit light; and the rear mirror having a phase compensated reflector to act as an output coupler for a lasing mode and to reflect pump light at a proper phase so as to provide a second pumping pass through the gain region; wherein the gain region is positioned relative to the rear mirror so as to position the peaks of the reflected pump light in alignment with said gain region during the second pumping pass therethrough; and wherein the gain region is positioned relative to said front mirror and said rear mirror so as to provide proper lasing. In one preferred form of the invention, the gain region is formed by multiple quantum wells (MQW).